

Abstract Submittal Form

Joint Army-Navy-NASA-Air Force (JANNAF)
61st JPM / 42nd SMBS / 38th PEDCS / 29th RNTS / 27th SEPS
Joint Subcommittee Meeting
19 – 22 May 2014

JPM Abstract Due Date: Monday, February 3, 2014

Title: Liquid and Solid Propulsion Systems Attributes - Unique, Common and Complementary

Submitted to: ☒ JPM ☐ SMBS* ☐ PEDCS* ☐ RNTS* ☐ SEPS*

Mission Area : ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

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Updated Paper? ☐ Yes ☒ No

Student Paper? ☐ Yes ☐ No

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Approval

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*** Additional Abstracts for SMBS, PEDCS, RNTS & SEPS will be considered on a space available basis. You are welcome to contact the Mission Area Chairs to inquire whether abstracts are needed.**

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Unclassified Abstract (250 – 300 words; do not include figures or tables)

In this study, attributes are described for solid and liquid propulsion systems based on historical data. This study is not intended to compare liquid and solid propulsion system attributes, rather to present options for their use in various mission scenarios. US launch vehicle data from 1970 to 2008 was analyzed to assess solid and liquid propulsion development cost and schedule characteristics, performance features, and safety and mission success attributes. The study assessed historical trends for liquid and solid systems, and investigated implications of those trends. It was found that the two propulsion technologies have unique, common and complementary attributes that can be leveraged to meet mission requirements.

- By submitting an abstract, you agree to both complete a final paper for publication and to attend the meeting to present this information.
- Submit abstracts electronically; submittal instructions are found in the call for papers.
- Direct questions to Shelley Cohen, by phone at 410.992.7302 x 215, or email to scohen@cpiaac.jhu.edu.